Public Health Labs Undervalued
When State Coffers Run Low

Ill-considered Budget Cuts May Undermine Disease Monitoring & Investigation

As government budgets shrink, public health laboratories in several states are taking part in a recurring drama in which they must justify their value to legislators or face draconian budget cuts, outsourcing of services, or both. “In times of budget crises,” said APHL Executive Director Scott Becker, “the public health lab can be on the chopping block in whole or in part—and it often is.” Yet health officials caution that while reducing public health lab capacity may slightly alleviate fiscal woes in the short term, imprudent cutbacks can have a profound and lasting effect on disease surveillance and community health.

Although public health laboratorians readily acknowledge that some testing can be better performed in the private sector, they make a sharp distinction between clinical services related to patient care—diabetes screening, pap smears, and the like—and public health services necessary to protect the health of populations.

Stan Falk, interim director of the Arkansas public health laboratory, noted that the lab has been slow to add any clinical tests to its repertoire of services. “Consider cholesterol,” said Falk. “That’s one of the most common tests in America and we don’t do that.” In fact, the lab is just beginning to contract out liver function testing (performed to support treatment for tuberculosis patients by monitoring drug toxicity to the liver). Falk said the cost in the private sector is about a third of the cost in the state public health lab due to economies of scale.

On the other hand, public health labs are reluctant to outsource core public health services, that is, laboratory testing to support community, rather than individual health. These essential services include analysis of human specimens—blood, urine, saliva—for infectious diseases, insect-borne diseases or environmental toxicants, and analysis of environmental samples—food, soil, water, mosquito pools—for disease organisms or toxic substances (e.g., mercury, lead, pesticides).

James Blumenstock, a commissioner with the New Jersey department of health and advisor to the National Center for Public Health Laboratory Leadership, explained that there are several reasons why these types of Cuts, continued on page 4...
Dear Members,

A few weeks ago, APHL asked associate members to submit nominations for representatives to join the board of directors in a non-voting capacity. After the email went out, I received a number of comments and inquiries as to the reasoning and process behind the decision. While I responded to each member individually, I will address their questions again here for the benefit of those who might share their concerns.

How did the board decide to expand representation?

Last fall APHL convened a task force to review and make recommendations for changes to the existing governance structure. The task force, comprised of full, associate, and delegate members, submitted its report in January 2003. Among other recommendations, the report cited expansion of board representatives. The board decided to pursue this recommendation after considering input from the membership satisfaction survey and the Membership Committee. This initiative is one of the first to be taken by the board of directors in response to the report.

Why are the new board members from the associate member category only?

Associate members, like delegates, are institutional members representing governmental public health laboratories—in this case county and local laboratories, or governmental environmental health or environmental quality labs. Unlike delegates who are represented by full members from their institution, associate members have had no voice in decision making at the board level. Because individual and emeritus members do not represent public health laboratories, it was felt that their expertise could be utilized more appropriately at the committee level.

Should the board have presented this proposal to the membership as a bylaws change?

A legal review of the association's bylaws indicated that the board has the authority to invite non-voting participants to its meetings. Adding voting members to the board does, however, require a change in the bylaws through a membership vote. Because the board wanted to act quickly to expand representation, it selected the option available under its existing authority. Recognizing that this may be a transitional measure, the board has requested that the initiative be reviewed after two years to evaluate its merit and determine whether further restructuring should be considered. The board has also asked the membership committee to review and recommend an appropriate membership structure for our growing organization. We expect the committee's report in one year.

It was more than four years ago that APHL changed its bylaws to expand membership beyond state public health laboratory directors. It did so because it realized that all public health laboratories must be represented if APHL is to represent the field effectively. The current initiative is the logical outcome of that decision and will allow the voices of county and local public health laboratories to be heard, thereby enabling the association to better pursue its mission.

Sincerely,

Dave Mills
EXECUTIVE DIRECTOR’S NOTE

Dear Members:

On March 19th and 20th, APHL hosted its annual Hill Day. Eleven of your colleagues traveled to Washington to express the association’s position in more than 30 individual meetings with lawmakers and staff. Our team highlighted the need for continued federal support (through CDC) for the following high priority programs or “line items”: Infectious Diseases, Terrorism Preparedness and Response, Environmental Health and Public Health Infrastructure.

It was strange to be on the Hill the day after the nation went to war. Was the attention of lawmakers diverted? You bet. With the nation’s threat level on Orange, there was tension in the air—the constant buzz of planes overhead protecting the city in an “air blanket,” a greater police and security presence and longer lines to enter public buildings. And it was raining so heavily that our clothes were soaked. Meanwhile in China and Hong Kong, SARS was evolving, though it hadn’t yet appeared on our shores. In years past, Hill Day was a beautiful spring day with early daffodils and even a few cherry blossoms. Not so this year—a different feeling enveloped us.

Despite the war, the emergence of a newly discovered infectious agent and the lousy weather, your colleagues pressed onward with their messages. Many meetings focused on terrorism support and how laboratories have been upgraded. State budget deficits were also a hot topic. How ironic, noted the congressional staff: at a time when there is more federal support than ever, states are in crisis.

Staff asked about our ongoing needs and wanted to know details. How long can we expect new instrumentation to last? When might newer, state-of-the-art instruments become available? Some of this interest can be attributed to personal experience. Remember, it wasn’t long ago that Hill staffers were the target of bioterrorism—many told us of their experiences during anthrax ‘01. We responded with answers emphasizing the need for an ongoing commitment to public health infrastructure, plus offers of laboratory tours and information on SARS.

We’re very grateful to the following members who participated this year: Dr. William Becker (OH); Dr. Sara Beatrice (NY); Dr. Ming Chan (FL); Dr. Nick Cirino (NY); Dr. Norman Crouch (MN); Dr. Mary Gilchrist (IA); Dr. Katherine Kelley (CT); Dr. Carol Kirk (WI); Ms. Janet Klawitter (WI); Dr. Susan Neill (TX); and Dr. Lawrence Sturman (NY).

Sincerely,

Scott J. Becker
Public Health Laboratories:

- Integrate with health department programs to meet specific data needs.
- Offer proven track record and continuity at time when commercial enterprises are in flux.
- Provide special services not readily available at other labs due to high cost or low test volume.
- Respond rapidly to health emergencies, working in tandem with field investigators and epidemiologists.

According to Lee, “By the time our TB program finds out about this, they’ve already lost a window of opportunity to treat the patients and control the disease in the community.” Moreover, he explained, Arkansas epidemiologists will want to know more: Are the two cases related? Is there a common exposure site? Often, he said, commercial labs cannot perform the sophisticated molecular tests needed to determine if the same disease strain is responsible for multiple cases or if the pathogen is antibiotic resistant. If the laboratory cannot, more time is lost while the TB isolate is transported from the lab in St. Louis to the state public health laboratory in Little Rock. The delay “really affects disease control,” said Lee.

Instead of tuberculosis, he added, the illness in question could easily be a diarrheal disease caused by a food- or waterborne organism, such as Escherichia coli or Salmonella. It could be chlamydia or another STD. Or it could be an agent of biological terrorism.

Florida’s state laboratory director, Ming Chan, noted that outsourcing core public health services could be risky. The issue, he said, boils down to one question: “Do we need public health labs?”

If so, a basic infrastructure—facilities, equipment, and trained staff—must be maintained. “A public health lab,” said Chan, “is like a fire department or an army. You never know when the next fire is going to come. When the next war is going to come. Or the next disease outbreak.” As Lou Turner, head of the North Carolina state lab, commented in a separate interview, “For the vigilance to be there, you have to have a trained competent workforce in place; you can’t just draw microbiologists out of the air.”
In some cases, public health clients may not be able to afford the cost of tests outsourced to private labs. It is particularly important, said Chan, that these populations be tested—even if the test must be priced below cost—because they tend to be at high risk for communicable diseases that can threaten entire communities. Although the Florida public health lab processed only 36% of all gonorrhea tests in the state in 1999, among those were 65% of all positive findings.

Once the capacity to perform specific services is lost in the public sector, it is not quickly or cheaply regained. Turner reported that 12 years ago the North Carolina legislature decided the state would no longer carry out testing to assure compliance with Environmental Protection Agency (EPA) regulations. “With the stroke of a pen and the wave of a hand,” said Turner, those services were outsourced to commercial labs that had lobbied government officials for the business. “We essentially lost a third of our workforce,” she noted.

But after test fees nearly tripled over a four-year period, the legislature asked the laboratory to resume operations. At that point, said Turner, “It was going to cost a million dollars for us to get back in the business (of EPA compliance testing), to rehire staff, to purchase new instrumentation.” The legislature, deeming the reentry costs too high, decided to keep those services in the private sector. (Since then, the Associated Press has reported that federal investigators have documented a “disturbing trend” of private labs falsifying environmental test results. Turner, however, said, the companies doing compliance testing in North Carolina are “doing fairly good work.”)

Concerned about states’ tendencies to outsource critical community health services, Falk conducted an informal survey of his colleagues across the country. Sixteen state lab directors responded, and, of these, five reported that they routinely send specimens to private labs and four that they occasionally do so—generally for clinical services related to patient care.

According to respondents, experiences with commercial labs have been mixed. Problems include: loss of time to transport specimens, limited ability to arrange for specimen pickup in rural areas, loss of staff time to reconcile billing problems and re-bid contracts on a regular basis, mandatory batching of specimens to meet volume requirements (usually resulting in longer turnaround times), poor quality control, inadequate data collection to meet program needs, and charges for “extra” services like phoned reports or rush testing. Turner noted that states often make cost comparisons based on the price of basic analytical services, “not for the extraordinary, which is what public health labs provide at no extra cost.”

The bottom line, said Blumenstock is that decisions to outsource laboratory testing should be based on a service-by-service analysis within the context of an overall laboratory business plan. Proposals to privatize all state laboratory testing, he said, represent a “very, very dangerous mindset.”

Public labs are closely integrated with health department programs, such as maternal and child health or sexually transmitted disease (STD) prevention, and are aware of program data needs. They have a proven track record and offer predictable continuity at a time when commercial enterprises come and go. They are staffed by public employees who can quickly shuffle priorities and operate as a team with field investigators and epidemiologists to respond to health emergencies.

The Centers for Disease Control and Prevention and the American Society for Microbiology co-sponsored the Fourth National Conference on West Nile virus, February 9-11, 2003, in New Orleans, LA. Approximately 350 attendees, mostly federal, state and county public health workers, shared surveillance and research data and reviewed lessons learned over the past four transmission seasons.

**Emergency Preparedness**

**Fourth National Conference on West Nile Virus in the United States**

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*WNV, continued on page 6...*
West Nile virus (WNV), a mosquito-borne flavivirus, is a human, equine and avian pathogen. Humans and horses are incidental hosts of WNV. Last summer West Nile virus swept across the United States, sickening about 4,000 people and killing 263. In humans viremia is low, generally less than 100 PFU/ml. The infection may be prolonged in immunosuppressed and older patients. Horses are affected by WNV more often than any other domestic animals. In 2002, there was an epizootic in the Midwest. An equine vaccine, estimated 94% efficacy, is now licensed and other vaccines for horses are under development. There are 162 species of birds affected by WNV. High viral loads have been detected in oral and cloacal swabs and feces. To date, the virus has been found in 37 species of mosquitoes. Culex pipiens, Culex restuans, Culex quinquefasciatus, and Culex tarsalis are important enzootic vectors. Potential competent bridge vectors include Aedes albopictus, Aedes salinarius, and Ochlerotatus japonicus.

Currently, scientists are considering strengthening the safety practices associated with WNV laboratory work. Biosafety level 3 practices, safety equipment, and facilities are recommended but, in practice, laboratorians often work in less-structured environments. For more information on working with West Nile virus, consult Biosafety in Microbiological and Biomedical Laboratories, 4th Edition (BMBL). Participants stressed that it was necessary to include safety precautions for field workers in the BMBL.

Other laboratory issues included the availability of commercial assays and reagents. According to CDC staff, commercially produced reagents and enzyme immunoassays (EIA) will soon be available. Studies have shown that the MAC-ELISA assay is the best for clinical diagnosis, but problems occur when there is a secondary flavivirus infection. Nucleic acid amplification technology (NAAT) has been shown to be insensitive for clinical diagnosis; however, it is being developed for use in blood donor screening.


Thus far, researchers have shown that all strains of the virus in the United States are greater than 99.8 percent identical. A new strain (NY99) has been identified as the possible cause of a severe neurological disease. Studies have also shown that the virus may persist in tissues and organs of some animals, raising concerns of transmission. In 2002, West Nile virus infections were associated with five new transmission modes: transplantation, transfusion, breastfeeding, transplacental, and occupational exposure. The majority of human infections with WNV are mosquito-borne; however, laboratory-acquired infections with WNV can also occur.

Conference participants expressed concern about the safety of laboratorians who work with the virus.
The APHL Minute Page 7

APHL's National Center for Public Health Laboratory Leadership (the Center) has been active since its launch in November 2002. The Center's influential Advisory Board met for the first time at APHL's Washington office on January 30, 2003. This group, representing diverse perspectives on the public health laboratory (PHL), discussed the need to develop best practices for PHL administration, to foster current and future leaders, and to build awareness of Center resources in the PHL community.

The Board's work will influence the identity and direction of the fledging center. Its purpose is to prioritize the Center's programs, develop new concepts and assist in developing a body of knowledge to build a technical base.

Center Advisory Board

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<th>Name</th>
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<tr>
<td>Eric Blank</td>
<td>Director, MO Public Health Laboratory</td>
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<tr>
<td>James Blumenstock</td>
<td>Senior Assistant Commissioner, NJ Department of Health</td>
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<td>Norman Crouch</td>
<td>Director, MN Department of Health</td>
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<td>James Gale</td>
<td>WA State local health official and NACCHO representative</td>
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<td>Paul Kimsey</td>
<td>Chair, Center Advisory Board and Assistant Deputy Director Laboratory Science, CA State Public Health Laboratory Director</td>
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<td>Robert Martin</td>
<td>Director, Division of Laboratory Systems, CDC/PHPPO</td>
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<td>Garry McKee</td>
<td>Administrator, USDA Food Safety and Inspection Service</td>
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<tr>
<td>Jan Nicholson</td>
<td>Associate Director for Laboratory Science, CDC/NCID</td>
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<td>Eric Sampson</td>
<td>Director, Division of Laboratory Science, CDC/NCEH</td>
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<tr>
<td>Peter Shult</td>
<td>Director, Communicable Disease Division, WI State Laboratory of Hygiene</td>
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<tr>
<td>Lou Turner</td>
<td>Chair of the APHL Training and Education Committee and Director, NC State Public Health Laboratory</td>
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<td>Burt Wilcke</td>
<td>University of VT Department of Biomedical Technologies and Chair, APHL Leadership Committee</td>
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<td>Kate Wright</td>
<td>Director, National Public Health Leadership Development Network, St. Louis University School of Public Health</td>
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Forums

In addition, the Center will sponsor public health laboratory leadership forums to introduce state laboratory directors and other stakeholders to the Center, its programs and priorities. Also on the agenda are issues such as benchmark #10 of CDC's program for public health preparedness and response for bioterrorism. The first forum was held April 9-10 in Seattle, WA; the second will take place in Chicago, IL, May 27-28.

Jon Counts, Clinical Assistant Professor at the University of Washington and organizer of the Seattle forum, observed, “Leadership needs have been around for 10 to 20 years, particularly in the area of developing relationships with the community and coalitions. I am optimistic that the Center will find a way to satisfy the needs of the membership.”

Other Center Initiatives

The Center will offer a media training workshop for laboratory leaders at the APHL annual meeting in June. Center representatives will also participate in the National Public Health Leadership Institute in North Carolina.

Grant-writing Workshops

With the support of CDC's Division of Laboratory Sciences, NCEH, the Center produced a series of grant-writing workshops as one of its first initiatives. The series, which opened in Atlanta with 15 participants, was designed to hone grant-writing skills specific to public health laboratory professionals. Other workshops in the series attracted participants from 38 states: Salt Lake City Workshop (March 12-13) 13 registrants; Philadelphia Workshop (March 19-20) 13 registrants; St. Louis Workshop (April 9-10) 24 registrants. Additional workshops are planned for the future.

NCPHLL, continued on page 8...
and collaborate on development of a laboratory segment for Public Health Grand Rounds, a distance education program targeted to local public health officials. The program is slated for presentation in the early fall.

**Fellowship**

**EID Fellowship Program Update**

Selection for the 2003/2004 class of fellows is well underway. Approximately 50 U.S. fellows and seven international fellows will be selected from a pool of nearly 250 applicants, a 40% increase from last year. APHL also received a record number of host laboratory applications, including two from first-time applicants: Mississippi and Oregon. Fellows will be matched to their host laboratories by July 18th, well in advance of the August 11-15th orientation in Atlanta. APHL intends to place half of the fellows in state and local laboratories and half in CDC laboratories.

**Infectious Disease**

**Perspective from a Trainee: Influenza Bench Training & Pandemic Preparedness**

Heather Berens, Wisconsin Veterinary Diagnostic Laboratory

For the first time, APHL and CDC are sponsoring a state veterinary microbiologist for an influenza traineeship at the National Center for Infectious Diseases. A similar traineeship has been available to state public health laboratorians for several years. The one-year traineeships provide bench training for microbiologists in molecular and classic methods of human influenza virus detection and strain identification. Veterinary trainees also work with influenza viruses from animal and avian hosts.

Traineeships are designed to increase the capacity and capability for influenza surveillance in both state public health and veterinary laboratories. They also improve pandemic preparedness by strengthening laboratory capabilities to identify influenza viruses of human significance and/or pandemic potential at the state level.

As one of the four WHO Collaborating Centers for Influenza throughout the world, the Influenza Branch at the CDC in Atlanta is the logical sponsor of such a traineeship. The Strain Surveillance Section, headed by Alexander Klimov, is responsible for the antigenic characterization of global human influenza isolates. Based upon data from serological studies and hemagglutination inhibition assays for isolates, recommendations are made twice a year for strains to be included in the human influenza vaccines for both the Southern and Northern Hemispheres. Given the risk of a pandemic, the Influenza Branch is also interested in surveillance of avian and swine influenza, but it is limited in capacity and must collaborate with veterinary laboratories and research institutions.

Influenza is an important human and veterinary pathogen. There are three types of influenza viruses: A, B, and C.

**Influenza A** - Widest host range. May cause a more severe disease in humans than influenza B. Caused all of the influenza pandemics of the twentieth century. Known to infect humans, swine, horses, sea mammals, mink, ferrets and many species of birds.

**Influenza B** - Primarily a human pathogen, it has been found in seals.

**Influenza C** - Infects humans and swine. Infection is usually asymptomatic or subclinical. Causes sporadic cases of a mild, non-descript common cold in humans.

Transmission of influenza from swine or birds to humans has occurred, sometimes with lethal consequences. Experts consider swine the mixing vessels for avian and human influenza strains. They may also be the intermediate host and site of reassortment. Direct transmissions of swine viruses to humans have occurred on several occasions. In 1977, a soldier at Fort Dix, NJ died of swine influenza, and the particular strain was capable of...
As an employee of the Wisconsin Veterinary Diagnostic Laboratory (WVDL), I was eager to accept a one-year traineeship at CDC to gain expertise with avian and swine influenza. WVDL is part of the University of Wisconsin system that serves veterinarians from the state and the rest of the U.S. WVDL performs surveillance tests for a variety of animal diseases as well as tests to qualify animals, semen and embryos for interstate and international shipment. Currently, WVDL does not participate in surveillance for avian or swine influenza, though the university has a strong reputation of avian and swine influenza research. Chris Olsen, an associate professor of public health in the veterinary school's Department of Pathobiological Sciences, is quite active in monitoring emergence of new strains of swine influenza.

Before I began my traineeship at the CDC, I was responsible for serologic testing for swine and cattle viruses and rickettsial diseases. During my first six months at the Strain Surveillance Section of the Influenza Branch at CDC, the focus of my training was the cultivation of avian viruses and their antigenic characterization. My training began with the propagation of human viral isolates in both ten-day old embryonated chicken eggs and in Madin-Darby Canine Kidney (MDCK) cell cultures. I assisted with and later performed the organization and execution of hemagglutination inhibition (HI) tests, as well as serologic assays on paired acute and convalescent sera. I collected murine ascites fluid for the production of monoclonal antibodies. After proper training and experience with techniques used for human isolates, I began to work with foreign and domestic avian viruses in the BSL-3+ facility. The work has included propagation of both low and highly pathogenic avian influenza viruses in embryonated chicken eggs, followed by antigenic characterization of the isolates utilizing the HI assay. Most recently I have received training in the use of ferrets for production of post-infection immune sera.

As a result of the training I have received in the Influenza Branch at CDC, I will be able provide training for other laboratorians at WVDL and the Wisconsin State Laboratory of Hygiene (WSLH).

My experience will help to better characterize isolates and possibly establish surveillance in the state for both swine and avian influenza. Moreover, since WVDL is in the process of building a BSL-3 laboratory, my knowledge and experience in BSL-3+ practices will be very helpful. I have learned how a BSL-3 laboratory is designed and may be able to train others in safety, proper procedures, and handling of highly pathogenic viruses.

I have greatly enjoyed my time in the Influenza Branch of CDC. The staff is friendly and welcoming, and the work environment is stimulating, yet comfortable. It has been a pleasure to work with influenza experts from around the globe. I have also had the opportunity to attend seminars and lectures covering topics in microbiology, epidemiology, and public health. I would enthusiastically recommend the traineeship to any microbiologist.

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...Flu, continued from page 8

human-to-human transition. Before 1997, it was not known if avian strains of influenza could infect humans without the use of a swine intermediate because experts had yet to observe direct transmission.

This changed in 1997 when the first documented cases of direct transmission of a purely avian virus to a human occurred in Hong Kong. Other cases were documented in 1999 and as recently as 2003. Fortunately, the strains of the avian influenza viruses that infected humans were not efficient in human-to-human transmission. However, given current trends, the emergence of a reassortant virus with avian and human genes that can spread from person to person is imminent. Thus, surveillance of avian and swine influenza is crucial for pandemic preparedness. Training by programs such as the influenza traineeship and further research are crucial for effective public health response.
APHL Offers First Infectious Disease Conference
Over 250 people attended the Association of Public Health Laboratories’ first infectious disease conference in Denver, CO, on March 5-7, 2003 — Molecular Methods: Impact on Public Health Practice, From BT to STDs. Presentations addressed the rapidly changing picture of West Nile virus and other arboviruses, HIV screening, the use of molecular methods in public health, regulatory issues with commercial FDA cleared and modified diagnostic kits, current issues in STD screening, plus an update on agents of bioterrorism. Forty-two poster presentations showcased the research of emerging infectious disease (EID) fellows and post-doc candidates, while seventeen exhibitors shared information on laboratory related products and services. Most presentations can be viewed at www.aphl.org/Infectious_Diseases/index.cfm.

The keynote speaker, James Hughes, MD, Director of the Centers for Disease Control and Prevention (CDC), National Centers for Infectious Diseases (NCID) presented on, “Emerging Infections and Bioterrorism: A CDC Perspective.” Dr. Hughes outlined the progression of how the public health laboratories have evolved in their preparation, capabilities and capacities to screen for emerging infectious diseases, including agents of bioterrorism. He emphasized that public health laboratories are the cornerstone in the national plan on bioterrorism.

The opening general session, “Testing for West Nile Virus and Other Arboviruses” described both molecular and non-molecular techniques and procedures used to screen for West Nile virus and other arboviruses. Several breakout sessions stressed the different roles that molecular screening may play in public health laboratories. Further discussions highlighted the changing role of the lab with the advent of rapid tests, resistance screening and diagnosing HIV incidence.

From presentations on the latest chlamydia and gonorrhea guidelines through the closing session on bioterrorism, it was clear that the conference was a great success. APHL hopes to duplicate this informative and valuable event at the 2nd Infectious Disease Conference in 2005.

Newborn Screening
NSG Committee Focuses on Policy
The annual meeting of the Newborn Screening and Genetics in Public Health Committee, held March 11-12, 2003, in San Diego, CA, focused on newborn screening policy. Having already completed two of the three approved APHL policy statements, the committee forged on to six new ones:

- Financing Newborn Screening
- Criteria for Selection of Newborn Screening Panel
- Retention of Specimen for Newborn Screening
- Quality Assurance in Newborn Screening Programs
- Newborn Screening Follow-up
- National Newborn Screening Agenda

The committee aims to receive approval of these policies before the end of the year. In addition, the group plans to develop a position statement on predictive genetic testing plus policies on emerging technology and integration of genomics into public health.

The committee discussed hours of operation for NBS laboratories and how a NBS laboratory might be able to work six to seven days per week in an emergency. The committee will also address contingency planning for Code Red scenarios.

Participants also considered the next newborn screening and genetic testing symposium. Dr. Jane Getchell, Director of Delaware Public Health Laboratory, was nominated as chair of the planning committee with Dr. Harry Hannon (CDC) as the honorary chair. The next symposium will be held in Atlanta, GA, in May 2004. The planning committee will work together with Hannon and the Quality Assurance/Quality Control/Proficiency Testing
subcommittee to plan a “wet” laboratory pre-conference workshop and a “dry” laboratory workshop.

The American College of Medical Genetics (ACMG) has been working on the standardization of outcomes and guidelines for state newborn screening programs. Dr. Mike Watson, executive director of ACMG, presented selected findings to the committee. The project aims to develop a uniform test panel. Other goals include: 1) development of model policies and procedures for state NBS programs by looking at minimum standards for follow-up, secondary screening, and other program components, 2) identifying core public health programs, 3) examining data management systems and 4) defining outcome considerations for individuals and families.

Dr. Michele Puryear, Health Resources and Services Administration (HRSA), informed the committee that HRSA’s genetics priority is initiation of the Title 26 Advisory Committee on Inheritable Disorders. The inheritable disorders program is designed to strengthen states’ ability to develop, evaluate and acquire innovative testing technologies, and establish and improve programs to provide screening, counseling, testing and special services for newborns and children at risk for inheritable disorders. The final report of the ACMG project is due to HRSA in March 2004. HRSA will then present the report to other federal agencies and the Title 26 Advisory Committee, whose charge is to recommend a panel of tests.

Laura Sternesky updated the committee on ASTHO’s genetics program and the status of the Genetics Toolkit Project. The purpose of the toolkit is to improve genomics capacity in state and local health agencies by assisting them in integrating genomics into public health policy and practice. The toolkit workgroup includes representatives from APHL, CSTE, AMCHP, NCSL, NACCHO, CSGC, CDD, CDC and HRSA*. The toolkit was successfully focus group tested in February 2003 and approved by the ASTHO Genetics Advisory Committee. It is now undergoing final revisions. Dissemination will begin in May 2003, at the Association of State and Territorial Directors of Health Promotion and Public Health Education annual meeting.

Other issues to be addressed by the NBS&GPH committee include molecular genetic epidemiology, host/pathogen interaction, research on links to vaccines and susceptibility makers in blood spots, DNA adducts and new genetic markers for breast cancer.

For more information, please contact Jelili Ojodu, program manager for newborn screening and genetics at jojodu@aphl.org, 202.822.5227 x235.

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*Abbreviations: CSTE – Council of State and Territorial Epidemiologists, AMCHP – Association of Maternal and Child Health Programs, NCSL – National Conference of State Legislators, NACCHO – National Association of County and City Health Officials, CSGC – Council of State Genetics Coordinators, CDD – Chronic Disease Directors.

LIMS

LIM System Requirements Completed

A common set of laboratory information management (LIM) system requirements specific to public health laboratories is now available to guide APHL member laboratories in decision-making about laboratory software. The requirements were developed through a collaboration of the Association of Public Health Laboratories and the Public Health Informatics Institute (the Institute).

The final document includes almost 500 separate LIM system requirements specifications that fall into four basic areas: requirements for each of the 16 pre-determined business processes; requirements that span all 16 business processes; requirements for the database interfaces between the LIM system and other relevant system databases; and delineation of vendor-related requirements specifications commonly found in requests for proposals.

“This requirements document includes specifications for all 16 identified business processes, and not all business processes are present in all public health laboratories,” says Anita Renahan-White, Institute project manager. “Laboratories can easily customize
The Institute released the final requirements document to APHL on April 15. The APHL Management and Information Systems committee and representatives of the 16 participating project partners approved the draft requirements document just four months after the initiative began.

A Model of Collaboration
The high level of involvement by project partners ensured that the final requirements were comprehensive and accurate. Throughout the project, small workgroups produced draft documents, which then were reviewed by the larger group, revised and submitted for approval before the next step in the project began. The partners’ vast experience in public health laboratories, in clinical and environmental aspects as well as information technology, combined with the Institute’s proficiency on public health information systems, brought a high level of expertise to the initiative.

Major phases of the fast-track project included writing the business case for LIM system requirements, describing 16 laboratory business processes, conducting four site visits to verify business processes and workflows, and then defining LIM system requirements based on that information.

Next Steps:
Finding Solutions to Match Requirements
The Institute is now working with APHL to assist laboratories with procuring LIM systems that coincide with their business processes and also take into consideration state procurement rules, budget, deadlines for committing funds, and their ability to manage with their current LIM systems.

Potential solutions include selecting commercial LIM systems vendors that meet system requirements and/or a collaborative development project. The Institute is currently evaluating vendors. In addition, the Institute and project partners are evaluating the
Q. What’s simultaneously unique and the same?
A. Public health laboratories.

The LIM system requirements project showed that, while each public health laboratory is unique in its organizational structure and facilities, all share basic business processes and data workflows. Thus, the LIM system requirements document can be adapted to all laboratories.

That similarity is very important, says Norman Crouch, PhD, director of the Minnesota Department of Health Public Health Laboratory and APHL president-elect. Although Minnesota has developed its own LIM system, he says, “We know how essential it is that our system be similar and compatible with systems that will be used by other public health laboratories, at local, state and federal levels.

“Because our laboratories play a key role in protecting the public’s health by providing critical data needed to develop public health policy and to implement prevention and control measures, it is essential that they be able to manage data and communicate findings within and between states. To do this effectively, it is necessary to have a compatible LIM system network.”

Crouch is hopeful that effective, available and affordable public health LIM systems not only will meet today’s public health needs, but will also “define new, essential roles for public health laboratories as they evolve into the future.”

feasibility of developing a home-grown LIM system or creating one from scratch. Meanwhile, discussions on ways to improve LITS-Plus™ continue between CDC, APHL and the Institute.

For information about the LIM System Requirements document, contact Helen Regnery, NEDSS Project Manager, hregnery@aphl.org.

Recent Board Actions

Refining APHL Governance

In January of 2002, APHL board of directors and committee chairs finalized the association’s strategic plan, which included a goal to “refine APHL governance and board operations.” Shortly thereafter, the board established a task force, chaired by Dr. Paul Kimsey, to assess APHL board and committee structure, processes and working relationships and to recommend any needed changes. The task force conducted a series of telephone conferences and surveys to elicit member views and submitted the results to APHL’s legal counsel for review. Some recommendations were found to conflict with the by-laws and therefore were not adopted. The following governance changes were adopted by the board of directors at the March 21-22, 2003 meeting.

1. Committee chairs shall participate in an intensive orientation process at the annual meeting.
2. Committee members may send a substitute to attend a committee meeting in his/ her place at his/ her own expense and with permission of the chair. Although substitutes may participate in discussion, they will not have voting rights.
3. A committee shall have no more than 12 members: a chair, a liaison to the Board of Directors and 10 members.
   a. Committee members shall be appointed by the president.
   b. The chair and staff liaison shall be provided with copies of the committee member applications and shall have the opportunity to provide the president with recommendations.
   c. Online application for committee membership shall be instituted for the 2003-2004 appointment process.
   d. A committee chair may appoint sub-committees or task forces with approval of the president. These groups may be made up of non-
committee APHL members if specific expertise is needed. With approval of the executive director, a committee chair may request that non-APHL members attend committee meetings if they offer special expertise.

e. Each board member shall be an ex-officio member, or “liaison,” of at least one committee to establish clear links and lines of communication between the committee and the board.

4. A council of chairs will be established as an intermediary group, led by the president-elect. This council will address crosscutting issues and share information about projects, work and committee needs.
   a. Each committee chair shall serve on the council throughout his/her term.
   b. The president-elect shall act as the principal conduit for communication to the board of directors and vice-versa.

5. Committee chairs shall serve a term of three years to ensure continuity and progress in the work of the committee. Chairs shall serve no more than two consecutive terms.
   a. Committee chairs should be nominated by members of that committee and submitted to the president for review.
   b. Prospective chairs must serve as a committee member for at least one year to be considered for nomination.
   c. Implementation of terms shall be staggered so that not all chairs turn over in the same year.
   d. Each chair shall present the charge to his/her committee at the first meeting of the new fiscal year and develop an action plan detailing actions/outcomes to be completed within that year. This plan must be submitted to the board by the end of August.

6. The board of directors shall be enlarged from seven to nine members to reflect the diversity of the membership.

   a. Two associate member representatives shall be invited to be non-voting members of the board.
   b. Associate member representatives shall serve a term of two years.
   c. Associate member representative terms will be staggered. Thus the first shall be appointed for 2003-2005 and the second for 2004-2006.

Other Recent Board Actions:

- Charged APHL staff with creating a development department to diversify APHL funding sources. To be evaluated after a trial period of 2.5 years.
- Approved formation of a committee on data and survey development, collection and distribution.
- Approved report from the membership committee and supported research to further refine membership categories.
- Approved new Board Policy Handbook.
- Approved Georgia’s request to hold the Newborn Screening and Genetic Testing Symposium in Atlanta on May 10-13, 2004.

If you have any questions regarding changes to APHL’s governance structure or recent motions, please contact Shawna Webster at swebster@aphl.org or 202.822.5227 ext. 225.

Member News

Karim E. Hechemy, Ph.D., Dipl. ABMM recently retired from the Wadsworth Center, New York State Department of Health, Albany, NY after 32 years of distinguished service as a research scientist. Over the last four years, Karim has served APHL as a member of the Global Health Program Committee. He led an APHL team to the Ivory Coast, attended three annual meetings and presented a poster on the APHL/CDC EID Laboratory Fellowship Program, among other activities. Karim sees a great, untapped potential in dedicated laboratory personnel from countries outside the U.S. He hopes to continue to contribute to the Global Health Program after his retirement. Thank you, Karim, for your enthusiasm and commitment to APHL.
Hill Day
Washington, D.C.
March 20, 2003

APHL staff and some members who participated in Hill Day 2003.

Front: Jennifer Liebreich, Carol Kirk, Norman Crouch, Ming Chan, Bill Becker, Susan Neill
Back: Jeff Jacobs, Jan Klawitter, Doug Drabkowski, Scott Becker

Public health laboratory leaders meet with key Appropriations staff.

Prepared to Respond: Today and Tomorrow
APHL 2003 Annual Meeting
June 8-10, Richmond, VA

* Learn the latest on bioterrorism, chemical terrorism, LIMS, emerging technology and more.

* Tour VA’s new state laboratory.

* Hear Dr. Ed Thompson of CDC’s Office of the Director and Nobel laureate, Dr. John Finn.

Check the APHL Web site for more information.

National Health Information Infrastructure
Developing a National Action Agenda for the NHII
June 30-July 2, 2003
Washington, DC
Renaissance Washington Hotel
999 9th Street NW
Washington, DC 20001
202.898.9000

For additional information, contact Dianne Norcutt by email, dnorcutt@s-3.com. The conference Web site is www.nhii-03.s-3.net.
The Association of Public Health Laboratories (APHL) is a national, non-profit dedicated to working with its members to strengthen public health laboratories. By promoting effective programs and public policy, APHL strives to provide public health laboratories with the resources and infrastructure needed to protect the health of U.S. residents and to prevent and control disease globally.

Statements in this newsletter are the responsibility of the authors alone and do not imply an endorsement by APHL officers, members, staff or management.

To submit an article for consideration, contact Emily Mumford via email, emumford@aphl.org.